Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A protein profiling system for identifying a protein biomarker characteristic of a tumor at least one specimen cell, comprising consisting essentially of:

a protein fractionation unit that separates a protein content of at least two tissue or specimen samples from a subject into a plurality of protein subgroups, wherein at least one of said samples contains only normal reference cells and at least one of said samples contains at least one tumor specimen cell;

a mass spectrometer that independently performs mass spectroscopy on each of said plurality of protein subgroups from said subject's samples, and outputs mass spectra subgroup data for each; and

a protein data processing unit that analyzes said mass spectra subgroup data to create a protein profile for each of said tissue or specimen samples, and identifies at least one protein biomarker characteristic of said tumor at least one specimen cell based on a comparison of said protein profile of said sample containing at least one tumor

specimen cell with said protein profile of said sample containing ~~only normal~~ reference

cells~~; and~~

~~a database that stores said protein profile and said identified protein~~

~~biomarker characteristic of said tumor cell.~~

2-4.   (Cancelled)

5.   (Previously Presented) The system of claim 1, wherein the protein data

processing unit uses an artificial neural network to identify said protein biomarkers.

6.   (Currently Amended) The system of claim 1, wherein the protein data

processing unit uses a peak analysis ~~techniques~~ technique to identify protein biomarkers.

7-10. (Cancelled)

11.   (Previously Presented) The system of claim 1, wherein said protein profile

comprises a comprehensive protein profile.

12-17. (Cancelled)

18.   (Withdrawn; Previously Presented)   A protein biomarker identified by the system of claim 1.

19.   (Cancelled)